



A new hard X-ray transient discovered by INTEGRAL: IGR J17559-2612

Esposito, V.; Ferrigno, C.; Bozzo, E.; Chenevez, J.; Drave, S. P.; Del Santo, M.; Watanabe, K.

Publication date:
2012

Document Version
Publisher's PDF, also known as Version of record

[Link back to DTU Orbit](#)

Citation (APA):
Esposito, V., Ferrigno, C., Bozzo, E., Chenevez, J., Drave, S. P., Del Santo, M., & Watanabe, K. (2012, Aug 15). A new hard X-ray transient discovered by INTEGRAL: IGR J17559-2612. The Astronomer's telegram No. ATel #4309 <http://www.astronomerstelegam.org/?read=4309>

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Outside
[GCN](#)
[IAUCs](#)


Other
 MacOS: [Dashboard Widget](#)
 Follow ATel on [Twitter](#)
[ATELstream](#)
[ATel Community Site](#)

The Astronomer's Telegram

[Post a New Telegram](#) | [Search](#) | [Information](#)
[Telegram Index](#)
[Obtain Credential To Post](#) | [RSS Feeds](#) | [Email Settings](#)

Present Time: 20 Dec 2012; 14:21 UT

This space for free for your conference.



[[Previous](#) | [Next](#) | [ADS](#)]

A new hard X-ray transient discovered by INTEGRAL: IGR J17559-2612

ATel #4309; [V. Esposito, C. Ferrigno, E. Bozzo \(ISDC - University of Geneva, Switzerland\), J. Chenevez \(DTU Space, Denmark\), S. P. Drave \(Univ. of Southampton, UK\), M. Del Santo \(INAF/IAPS, Italy\), K. Watanabe \(Florida Gulf Coast University, USA\)](#)

on 15 Aug 2012; 20:44 UT

Distributed as an Instant Email Notice Transients

Credential Certification: Carlo Ferrigno (Carlo.Ferrigno@unige.ch)

Subjects: X-ray, Gamma Ray, Request for Observations, Transient

Referred to by ATel #: [4322](#), [4342](#)

INTEGRAL discovered a new hard X-ray transient, IGR J17559-2612, during the Galactic center observations performed from 2012-08-14 00:02:14 to 2012-08-14 14:45:54 UTC.

The source is detected in the IBIS/ISGRI mosaic at a significance level of 8σ (observation good time: 50 ks) both in the 20-40 keV and the 40-80 keV energy bands. The corresponding fluxes are 11.9 ± 1.4 mCrab and 17.5 ± 2.1 mCrab ($9.2 \pm 1.1 \times 10^{-11}$ and $1.21 \pm 0.14 \times 10^{-10}$ erg/s/cm², uncertainties are at 68% c.l.).

Due to off-axis pointing, the source is not detected in the combined mosaic of the two JEM-X units with a 3σ upper limits of 15 and 20 mCrab in the 3-10 keV and 10-20 keV energy bands, respectively.

The best source position determined with IBIS is

RA= 268.99 (17h 55m 58s)

Dec= -26.21 (-26d 12' 36")

(J2000) with an associated pointing uncertainty of 3.5 arcmin at 90% c.l. (the Galactic coordinates are $l = 3.515$ $b = -0.572$).

The IBIS/ISGRI spectrum can be described ($\chi^2_{\text{red}}/\text{d.o.f.} = 0.4$ for 8 d.o.f.) by a power-law ($\Gamma = 1.6 \pm 0.3$, uncertainty at 90% c.l.). The 20-100 keV flux estimated from the spectral fit is 3.0×10^{-10} erg/s/cm² (18 mCrab).

Multi-wavelength follow-up observations are encouraged to unveil the nature of this transient.



Tweet

1



Recommend

0



[[Telegram Index](#)]

R. E. Rutledge, Editor-in-Chief

Derek Fox, Editor

rrutledge@astronomerstelegram.org

dfox@astronomerstelegram.org